

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previously submitted listings of claims in this application:

1-275. **(Cancelled)**

276. **(Currently Amended)** A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, the method comprising: contacting *in vivo* a multi-epitopic antigen selected from the group consisting of CA 125, CA 19.9, CA 15.3 and PSA present in a host's serum with a composition comprising a non-radiolabeled antibody or antigen binding fragment thereof that specifically binds to a first epitope on the multi-epitopic *in vivo* antigen, whereby the antibody or antigen binding fragment thereof forms an immune complex with the antigen, and whereby an effective host T cell response ~~is elicited~~ against the antigen in the immune complex is elicited.

277. **(Currently Amended)** A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, the method comprising: contacting *in vivo* a multi-epitopic antigen selected from the group consisting of CA 125, CA 19.9, CA 15.3 and PSA present in a host's serum with a composition comprising a non-radiolabeled antibody or antigen binding fragment thereof that specifically binds to an epitope on the multi-epitopic *in vivo* antigen, whereby the antibody or antigen binding fragment thereof forms an immune complex with the antigen, and whereby ~~the complex elicits~~ an effective host humoral immune response against a second epitope of the multi-epitopic *in vivo* antigen is elicited.

278. **(Currently Amended)** A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, the method comprising: contacting *in vivo* a multi-epitopic antigen selected from the group consisting of CA 125, CA 19.9, CA 15.3 and PSA present in a host's serum with a composition comprising a non-radiolabeled antibody or antigen binding fragment thereof

that specifically binds to an epitope on the multi-epitopic *in vivo* antigen, whereby the antibody or antigen binding fragment thereof forms an immune complex with the antigen, and whereby ~~the complex elicits~~ an effective host T cell response against the antigen in the immune complex and an effective humoral immune response against a second epitope of the multi-epitopic *in vivo* antigen is elicited.

- 279. **(Previously Presented)** The method of claim 276, wherein the antigen is CA 125.
- 280. **(Previously Presented)** The method of claim 279, wherein the antigen CA 125 is present in the host's serum at levels greater than 100 U/ml.
- 281. **(Previously Presented)** The method of claim 279, wherein the host has ovarian cancer.
- 282. **(Previously Presented)** The method of claim 279, wherein the antibody is B43.13 which is producible by a hybridoma having ATCC deposit number PTA-1883, or an antigen binding fragment of said antibody.
- 283. **(Previously Presented)** The method of claim 276, wherein the antigen is CA 19.9.
- 284. **(Previously Presented)** The method of claim 283, wherein the host has gastrointestinal cancer.
- 285. **(Previously Presented)** The method of claim 283, wherein the host suffers from inflammation.
- 286. **(Previously Presented)** The method of claim 283, wherein the antibody is Alt-3 which is producible by a hybridoma having ATCC deposit number PTA-2691, or an antigen binding fragment of said antibody.
- 287. **(Currently Amended)** The method of claim 283, wherein the antibody is Alt-4 which is producible by a hybridoma having ATCC deposit number [[PTA-2691]] PTA-2692, or an antigen binding fragment of said antibody.

288. **(Previously Presented)** The method of claim 276, wherein the antigen is CA 15.3.
289. **(Previously Presented)** The method of claim 288, wherein the host has breast cancer.
290. **(Previously Presented)** The method of claim 276, wherein the antigen is PSA.
291. **(Previously Presented)** The method of claim 290, wherein the host has prostate cancer.
292. **(Previously Presented)** The method of claim 290, wherein the antibody is AR47.47 which is producible by a hybridoma having ATCC deposit number HB-12526, or an antigen binding fragment of said antibody.
293. **(Previously Presented)** The method of claim 276, wherein the antibody or antigen binding fragment thereof is present in the composition in an amount of from 0.1 µg to 200 µg per kg of body weight of the host.
294. **(Previously Presented)** The method of claim 276, wherein the antibody or antigen binding fragment thereof is formulated for administration to the host at a dose of about 2 mg per host.
295. **(Previously Presented)** The method according to claim 276, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.
296. **(Previously Presented)** The method of claim 276, wherein the composition comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
297. **(Previously Presented)** The method of claim 276, wherein contacting comprises administering by intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.

298. **(Previously Presented)** The method of claim 276, wherein contacting comprises administering the composition in solution, tablet, or aerosol form.
299. **(Previously Presented)** The method of claim 277, wherein the antigen is CA 125.
300. **(Previously Presented)** The method of claim 299, wherein the antigen CA 125 is present in the host's serum at levels greater than 100 U/ml.
301. **(Previously Presented)** The method of claim 299, wherein the host has ovarian cancer.
302. **(Previously Presented)** The method of claim 299, wherein the antibody is B43.13 which is producible by a hybridoma having ATCC deposit number PTA-1883, or an antigen binding fragment of said antibody.
303. **(Previously Presented)** The method of claim 277, wherein the antigen is CA 19.9.
304. **(Previously Presented)** The method of claim 303, wherein the host has gastrointestinal cancer.
305. **(Previously Presented)** The method of claim 303, wherein the host suffers from inflammation.
306. **(Previously Presented)** The method of claim 303, wherein the antibody is Alt-3 which is producible by a hybridoma having ATCC deposit number PTA-2691, or an antigen binding fragment of said antibody.
307. **(Currently Amended)** The method of claim 303, wherein the antibody is Alt-4 which is producible by a hybridoma having ATCC deposit number ~~[[PTA-2691]]~~ PTA-2692, or an antigen binding fragment of said antibody.
308. **(Previously Presented)** The method of claim 277, wherein the antigen is CA 15.3.
309. **(Previously Presented)** The method of claim 308, wherein the host has breast cancer.

310. **(Previously Presented)** The method of claim 277, wherein the antigen is PSA.
311. **(Previously Presented)** The method of claim 310, wherein the host has prostate cancer.
312. **(Previously Presented)** The method of claim 310, wherein the antibody is AR47.47 which is producible by a hybridoma having ATCC deposit number HB-12526, or an antigen binding fragment of said antibody.
313. **(Previously Presented)** The method of claim 277, wherein the antibody or antigen binding fragment thereof is present in the composition in an amount of from 0.1  $\mu$ g to 200  $\mu$ g per kg of body weight of the host.
314. **(Previously Presented)** The method of claim 277, wherein the antibody or antigen binding fragment thereof is formulated for administration to the host at a dose of about 2 mg per host.
315. **(Previously Presented)** The method according to claim 277, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.
316. **(Previously Presented)** The method of claim 277, wherein the composition comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
317. **(Previously Presented)** The method of claim 277, wherein contacting comprises administering by intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
318. **(Previously Presented)** The method of claim 277, wherein contacting comprises administering the composition in solution, tablet, or aerosol form.
319. **(Previously Presented)** The method of claim 278, wherein the antigen is CA 125.

320. **(Previously Presented)** The method of claim 319, wherein the antigen CA 125 is present in the host's serum at levels greater than 100 U/ml.
321. **(Previously Presented)** The method of claim 319, wherein the host has ovarian cancer.
322. **(Previously Presented)** The method of claim 317, wherein the antibody is B43.13 which is producible by a hybridoma having ATCC deposit number PTA-1883, or an antigen binding fragment of said antibody.
323. **(Previously Presented)** The method of claim 278, wherein the antigen is CA 19.9.
324. **(Previously Presented)** The method of claim 323, wherein the host has gastrointestinal cancer.
325. **(Previously Presented)** The method of claim 323, wherein the host suffers from inflammation.
326. **(Previously Presented)** The method of claim 323, wherein the antibody is Alt-3 which is producible by a hybridoma having ATCC deposit number PTA-2691, or an antigen binding fragment of said antibody.
327. **(Currently Amended)** The method of claim 323, wherein the antibody is Alt-4 which is producible by a hybridoma having ATCC deposit number ~~[[PTA-2691]]~~ PTA-2692, or an antigen binding fragment of said antibody.
328. **(Previously Presented)** The method of claim 278, wherein the antigen is CA 15.3.
329. **(Previously Presented)** The method of claim 328, wherein the host has breast cancer.
330. **(Previously Presented)** The method of claim 278, wherein the antigen is PSA.
331. **(Previously Presented)** The method of claim 330, wherein the host has prostate cancer.

332. **(Previously Presented)** The method of claim 330, wherein the antibody is AR47.47 which is producible by a hybridoma having ATCC deposit number HB-12526, or an antigen binding fragment of said antibody.
333. **(Previously Presented)** The method of claim 278, wherein the antibody or antigen binding fragment thereof is present in the composition in an amount of from 0.1 µg to 200 µg per kg of body weight of the host.
334. **(Previously Presented)** The method of claim 278, wherein the antibody or antigen binding fragment thereof is formulated for administration to the host at a dose of about 2 mg per host.
335. **(Previously Presented)** The method according to claim 278, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.
336. **(Previously Presented)** The method of claim 278, wherein the composition comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
337. **(Previously Presented)** The method of claim 278, wherein contacting comprises administering by intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
338. **(Previously Presented)** The method of claim 278, wherein contacting comprises administering the composition in solution, tablet, or aerosol form.
339. **(New)** The method of claim 276, wherein said non-radiolabeled antibody or antigen binding fragment thereof comprises an Fc portion that binds an Fcγ RII receptor.

340. (New) The method of claim 276, wherein the antibody is an IgG1 antibody or an antigen-binding fragment thereof.
341. (New) The method of claim 278, wherein said non-radiolabeled antibody or antigen binding fragment thereof comprises an Fc portion that binds an Fcγ RII receptor.
342. (New) The method of claim 278, wherein the antibody is an IgG1 antibody or an antigen-binding fragment thereof.
343. (New) The method of claim 276, wherein the multi-epitopic *in vivo* antigen is CA 125, and the first epitope on the multi-epitopic *in vivo* antigen is the epitope bound by an antibody produced by the hybridoma having ATCC deposit number PTA-1883.
344. (New) The method of claim 277, wherein the multi-epitopic *in vivo* antigen is CA 125, and the epitope on the multi-epitopic *in vivo* antigen is the epitope bound by an antibody produced by the hybridoma having ATCC deposit number PTA-1883.
345. (New) The method of claim 278, wherein the multi-epitopic *in vivo* antigen is CA 125, and the epitope on the multi-epitopic *in vivo* antigen is the epitope bound by an antibody produced by the hybridoma having ATCC deposit number PTA-1883.
346. (New) The method of claim 276, wherein the antibody or antigen binding fragment thereof is specific for a single epitope.
347. (New) The method of claim 346, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.
348. (New) The method of claim 277, wherein the antibody or antigen binding fragment thereof is specific for a single epitope.



349. **(New)** The method of claim 348, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.
350. **(New)** The method of claim 278, wherein the antibody or antigen binding fragment thereof is specific for a single epitope.
351. **(New)** The method of claim 350, wherein the antibody or antigen binding fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered antibody, a Fab fragment, a F(ab')<sub>2</sub> fragment, a single chain antibody, and a single chain antibody fragment.